

## PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

**PCT**  
**NOTIFICATION OF ELECTION**  
(PCT Rule 61.2)

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 06 June 2001 (06.06.01)	
<b>International application No.</b> PCT/US00/07817	<b>Applicant's or agent's file reference</b> PF-0681 PCT
<b>International filing date (day/month/year)</b> 22 March 2000 (22.03.00)	<b>Priority date (day/month/year)</b> 22 March 1999 (22.03.99)
<b>Applicant</b> YUE, Henry et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
11 October 2000 (11.10.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<p>The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland</p> <p>Facsimile No.: (41-22) 740.14.35</p>	<p>Authorized officer</p> <p style="text-align: center;">Charlotte ENGER</p> <p>Telephone No.: (41-22) 338.83.38</p>
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# PATENT COOPERATION TREATY

**PCT**

## NOTIFICATION OF THE RECORDING OF A CHANGE

(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

HAMLET-COX, Diana  
Incyte Pharmaceuticals, Inc.  
3160 Porter Drive  
Palo Alto, CA 94304  
ETATS-UNIS D'AMERIQUE

Date of mailing (day/month/year) 11 June 2001 (11.06.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference PF-0681 PCT	
International application No. PCT/US00/07817	International filing date (day/month/year) 22 March 2000 (22.03.00)

1. The following indications appeared on record concerning:		
<input checked="" type="checkbox"/> the applicant	<input checked="" type="checkbox"/> the inventor	<input type="checkbox"/> the agent <input type="checkbox"/> the common representative
Name and Address AZIMZAI, Yalda 2045 Rock Springs Drive Hayward, CA 94545 United States of America	State of Nationality US	State of Residence US
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input type="checkbox"/> the person	<input type="checkbox"/> the name	<input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence
Name and Address AZIMZAI, Yalda 5518 Boulder Canyon Drive Castro Valley, CA 94552 United States of America	State of Nationality US	State of Residence US
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned	
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer A. Karkachi Telephone No.: (41-22) 338.83.38
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## TENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>PF-0681 PCT</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/ 07817</b>	International filing date (day/month/year) <b>22/03/2000</b>	(Earliest) Priority Date (day/month/year) <b>22/03/1999</b>
Applicant <b>INCYTE PHARMACEUTICALS, INC.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☒ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☒ furnished subsequently to this Authority in computer readable form.

☒ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☒ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☒ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No.

PCT/US 00/07817

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/47 C12N5/10 C12P21/00 C07K16/18  
 A61K38/17 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K C12P A61K C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 834 563 A (SMITHKLINE BEECHAM CORP) 8 April 1998 (1998-04-08) the whole document ---	1-17,20, 23
P,X	HAMMOND H.A. ET AL.: "Homo sapiens chromosome 11 clone pac255-m-19 map 11q13,***sequencing in progress***, 7 ordered pieces" EMBL DATABASE SEQUENCE AC024127;ACCESSION NO. AC024127, 24 February 2000 (2000-02-24), XP002148958 --- -/--	1-5,10, 11

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&amp;" document member of the same patent family

Date of the actual completion of the international search

9 October 2000

Date of mailing of the international search report

10. 1. 01

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Schönwasser, D

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/07817

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NCI-CGAP: "National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index <a href="http://www.ncbi.nlm.nih.gov/ncicgap;">http://www.ncbi.nlm.nih.gov/ncicgap</a>; ot03c01.s1 NCI CGAP_GC3 Homo sapiens cDNA clone IMAGE:1613760-3', mRNA sequence" EMBL DATABASE ENTRY AI000010; ACCESSION NO. AI000010,5 June 1998 (1998-06-05), XP002148959</p> <p>-----</p>	1-5,10, 11

### Information on patent family members

PG1/US 00/07817

Form PCT/ISA/210 (patent family annex) (July 1992)

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US 00/07817

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claim 16 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.: 18,19,21,22  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
  
1-23 ( ALL PARTIALLY)

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## 1. Claims: 1-23 (all partially)

## Invention No.: 1

An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:1 or homologues or fragments thereof; an isolated polynucleotide encoding said polypeptide; a recombinant polynucleotide comprising a promoter sequence operably linked to said polynucleotide; a cell transformed with said recombinant polynucleotide; a transgenic organism comprising said recombinant polynucleotide; a method for producing said polypeptide; an isolated antibody which specifically binds to said polypeptide; an isolated polynucleotide comprising the polynucleotide sequence of SEQ ID NO:30 or homologues or complements thereof; a method for detecting a target polynucleotide in a sample, wherein said target polynucleotide has a sequence of above polynucleotide; a pharmaceutical composition comprising an effective amount of above polypeptide; a method for treating a disease or condition comprising administering said pharmaceutical composition; a method for screening a compound for effectiveness as an agonist or antagonist of above polypeptide; a method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein the target polynucleotide comprises above isolated polynucleotide.

## 2. Claims: 1-23 (all partially)

## Inventions Nos.: 2-28

Inventions no. 2-28 relate to subject-matter as defined above for "invention 1", with the exception, that inventions no. 2-28 refer to one of the polypeptide sequences SEQ ID NO:2 to SEQ ID NO: 23 and SEQ ID NO:25 to SEQ ID NO:29 (and the respective polynucleotide sequences SEQ ID NO:31 to SEQ ID NO:52 and SEQ ID NO:54 to SEQ ID NO:58).



## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 18,19,21,22

Claims 18 and 19 refer to an agonist compound and its use, wherein said agonist is identified by a method according to claim 17, without giving a true technical characterization of said agonist compound.

Moreover, no such compounds are defined in the application. In consequence, the scope of said claims is ambiguous and vague and their subject-matter is not sufficiently disclosed and supported.

The above comment also applies to claims 21 and 22, which refer to an antagonist compound and its use.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

## INTERNATIONAL SEARCH REPORT

 Int'l Application No  
 PCT/US 00/07817

## A. CLASSIFICATION OF SUBJECT MATTER

 IPC 7 C12N15/12 C07K14/47 C12N5/10 C12P21/00 C07K16/18  
 A61K38/17 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07K C12P A61K C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 834 563 A (SMITHKLINE BEECHAM CORP) 8 April 1998 (1998-04-08) the whole document	1-17,20, 23
P,X	--- HAMMOND H.A. ET AL.: "Homo sapiens chromosome 11 clone pac255-m-19 map 11q13,***sequencing in progress***, 7 ordered pieces" EMBL DATABASE SEQUENCE AC024127;ACCESSION NO. AC024127, 24 February 2000 (2000-02-24), XP002148958 --- -/--	1-5,10, 11



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "8" document member of the same patent family

Date of the actual completion of the international search

9 October 2000

Date of mailing of the international search report

10. 1. 01

Name and mailing address of the ISA

 European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Schönwasser, D

## INTERNATIONAL SEARCH REPORT

Int. Patent Application No

PCT/US 00/07817

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>NCI-CGAP: "National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index <a href="http://www.ncbi.nlm.nih.gov/ncicgap;">http://www.ncbi.nlm.nih.gov/ncicgap</a>; ot03c01.s1 NCI CGAP GC3 Homo sapiens cDNA clone IMAGE:1613760-3', mRNA sequence" EMBL DATABASE ENTRY AI000010; ACCESSION NO. AI000010, 5 June 1998 (1998-06-05), XP002148959</p> <p>-----</p>	1-5,10, 11

# INTERNATIONAL SEARCH REPORT

national application No.  
PCT/US 00/07817

## Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Although claim 16 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.**
2. ☒ Claims Nos.: **18,19,21,22**  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
**see FURTHER INFORMATION sheet PCT/ISA/210**
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:  
**1-23 ( ALL PARTIALLY )**

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## 1. Claims: 1-23 (all partially)

## Invention No.: 1

An isolated polypeptide comprising the amino acid sequence of SEQ ID NO:1 or homologues or fragments thereof; an isolated polynucleotide encoding said polypeptide; a recombinant polynucleotide comprising a promoter sequence operably linked to said polynucleotide; a cell transformed with said recombinant polynucleotide; a transgenic organism comprising said recombinant polynucleotide; a method for producing said polypeptide; an isolated antibody which specifically binds to said polypeptide; an isolated polynucleotide comprising the polynucleotide sequence of SEQ ID NO:30 or homologues or complements thereof; a method for detecting a target polynucleotide in a sample, wherein said target polynucleotide has a sequence of above polynucleotide; a pharmaceutical composition comprising an effective amount of above polypeptide; a method for treating a disease or condition comprising administering said pharmaceutical composition; a method for screening a compound for effectiveness as an agonist or antagonist of above polypeptide; a method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein the target polynucleotide comprises above isolated polynucleotide.

## 2. Claims: 1-23 (all partially)

## Inventions Nos.: 2-28

Inventions no. 2-28 relate to subject-matter as defined above for "invention 1", with the exception, that inventions no. 2-28 refer to one of the polypeptide sequences SEQ ID NO:2 to SEQ ID NO: 23 and SEQ ID NO:25 to SEQ ID NO:29 (and the respective polynucleotide sequences SEQ ID NO:31 to SEQ ID NO:52 and SEQ ID NO:54 to SEQ ID NO:58).

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 18,19,21,22

Claims 18 and 19 refer to an agonist compound and its use, wherein said agonist is identified by a method according to claim 17, without giving a true technical characterization of said agonist compound.

Moreover, no such compounds are defined in the application. In consequence, the scope of said claims is ambiguous and vague and their subject-matter is not sufficiently disclosed and supported.

The above comment also applies to claims 21 and 22, which refer to an antagonist compound and its use.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/07817

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0834563 A	08-04-1998	JP 10179178 A US 5824504 A	07-07-1998 20-10-1998
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